6. Guang

Program Name: Guang.java **Test Input File: guang.dat**

Numbers have always fascinated Guang, and recently he has been playing around with the idea of expressing numbers in different bases. To make it even more interesting, he adds zeroes to the front of the converted value equal to how many digits are in the converted value.

For example, the base 10 value 22 converts to 1333 in base 3, and so he writes his final value with four leading zeroes, 00001333. The decimal value 17 becomes 0021 in octal using his output scenario, and the value 29 becomes 001D in base 16.

Input: Several pairs of integers N ($0 < N < 10000$) and B ($1 < B < 37$), each on one line with single space separation, N representing a base 10 value, and B representing the base to which Guang will convert the value N.

Output: The converted value according to the expression format described above, with as many leading zeroes as there are significant digits in the newly converted value.

Sample input:

```
22 3
17 8
29 16
```

Sample output:

```
000211
0021
001D
```